

**Summary of Improvements in Diabetes Care Among Iowa's
Community Health Centers
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Control in diabetics is measured today by the level of the Hemoglobin A1c, lower numbers being more desirable, and numbers below 7 are sought. At the end of 2006 we had information on approximately 5,500 diabetics in our disease registry. This is out of a total Community Health Center population in Iowa of almost 100,000. Of our total population, 60% are Caucasian, 20% Hispanic and 14.7% African American. In our diabetic population in the registry, this percentage is matched almost exactly, with slightly more African American and fewer Hispanic being identified as diabetic.

After beginning with an average HgA1c of 8.3, each Center embarked upon a structured chronic care program to improve the care of diabetics. This involved viewing our diabetics as a population to be served, not just a series of one on one encounters between patients and providers. The care model required us to track data on the individual patients and the entire population of diabetics, change the way care was delivered, empower patients to become more involved in their own care, and regular feedback to our care teams on the outcomes of their work. **These are all component of what today is often called a *medical home*.**

With these interventions by 10/06 our average HgA1c had fallen to 7.5. This compared very favorably to the Midwest and national averages of 7.7 and 7.8 among similar Community Health Centers in the same structured program.

From this data we have used a financial projection tool, IMPACT, to measure cost savings over three years, based on our observed reduction in HgA1c levels. This tool projects estimated cost savings as the HgA1c falls. It is based on a variety of clinical studies showing that reduction in HgA1c levels across a population produces, for example, reduced hospitalizations for myocardial infarction, reduced numbers of kidney transplants, or reduced need for laser interventions in diabetic eye disease.

We based our projections on our 5,500 diabetic patients, and a drop in HgA1c from an average of 8.3 upon entry into our chronic care program, to 7.5, currently. Using the IMPACT software we were able to project the **substantial cost saving over three years of 4.2 million dollars to the healthcare system.** These saving accrue directly to the payers of health care. For example, based on an average number of Wellmark patients in our centers of 8%, the savings to WellMark would be about \$293,000. For Medicaid, at 20+% of our diabetic users, the savings would be about \$750,000.

It should be noted that the cost of the interventions used in the chronic disease model are borne by the primary care sector – our member CHCs. We have

attempted to estimate that cost at \$550,000 and reduced the financial impact by that amount to come to a true savings of \$3.6 million. Our costs include, for example, the cost of data entry, some additional patient visits, and extra time spent by the clinical team with education. This cost, however, may be underestimated, and thus the ultimate savings reduced. It should also be noted that the **savings, whatever they may ultimately be, accrue to the insurers or the Federal and State governments, and not to the primary care system.**

We also should mention that cost projections are just that – projections. They are not actual cost savings based on controlled studies. For example, the cost of hospitalization used in IMPACT may not be our patients' true costs, nor may our hospitalization rates be the same as those used in the model.

Despite these caveats, we are certain that the work we have undertaken to reform the care provided to our patients is resulting in substantial savings to our health care system. In particular, this work has meaning due to the large number of minorities and uninsured we serve (40% each). Numerous studies have shown that the United States' dismal showing among modern nations in health care outcomes (such as life expectancy, infant mortality, etc.) is directly related to the lack of primary care infrastructure in our country.